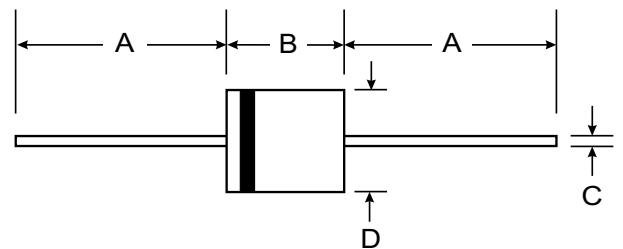
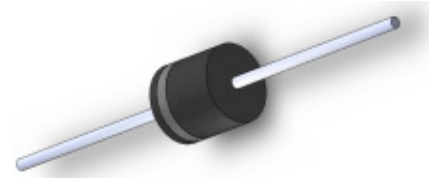


VOLTAGE RANGE: 20 - 300V
POWER: 20000Watts

Features

- Glass passivated junction 20000W Peak Pulse Power capability on 10/1000 μ s waveform
- Excellent clamping capability
- Repetition rate (duty cycle):0.05%
- Low incremental surge resistance
- Fast response time: typically less than 1.0 ps from 0 volts to BV
Typical I_d less than 1 μ A above 10V



| R-6 | | |
|----------------------|------|-----|
| Dim | Min | Max |
| A | 25.4 | — |
| B | 8.6 | 9.1 |
| C | 1.2 | 1.3 |
| All Dimensions in mm | | |

Mechanical Data

- Case:R-6
- Polarity: Color band denoted positive end (cathode) except Bipolar
- Terminals: Plated Axial leads, solderable per
- Mounting Position: Any
- Weight: 2.10 grams (approx.)



Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

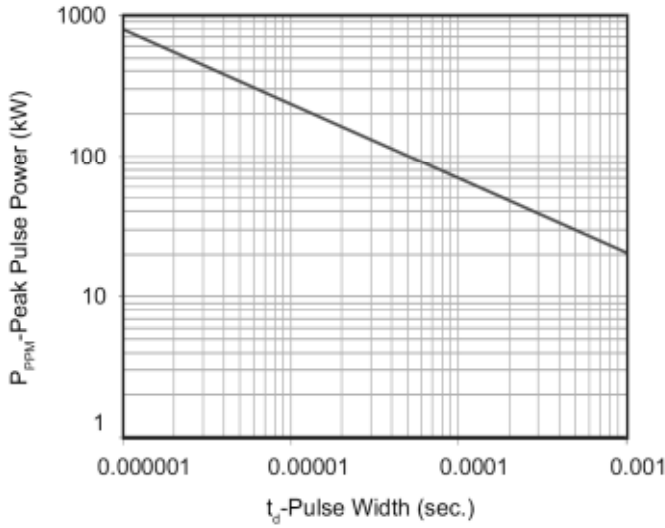
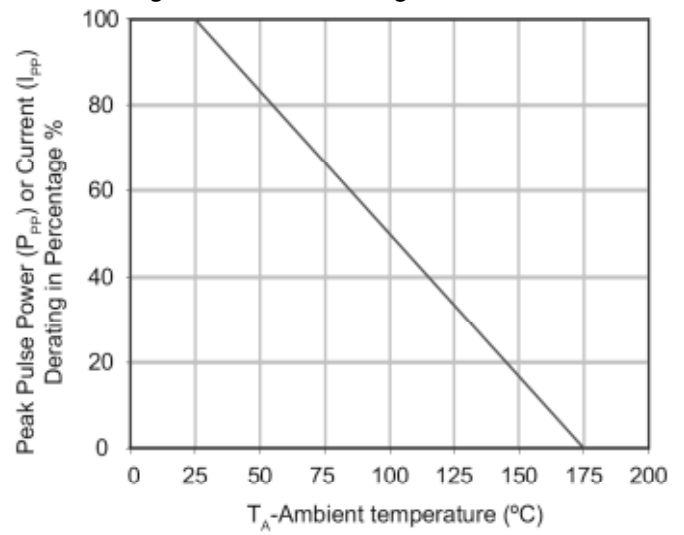
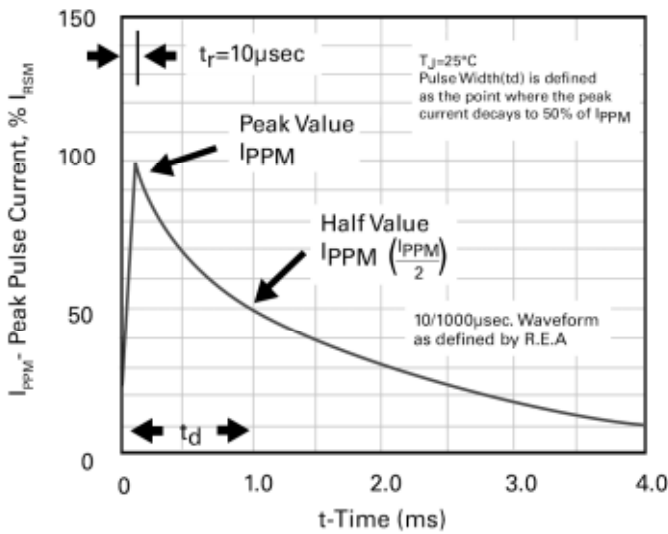
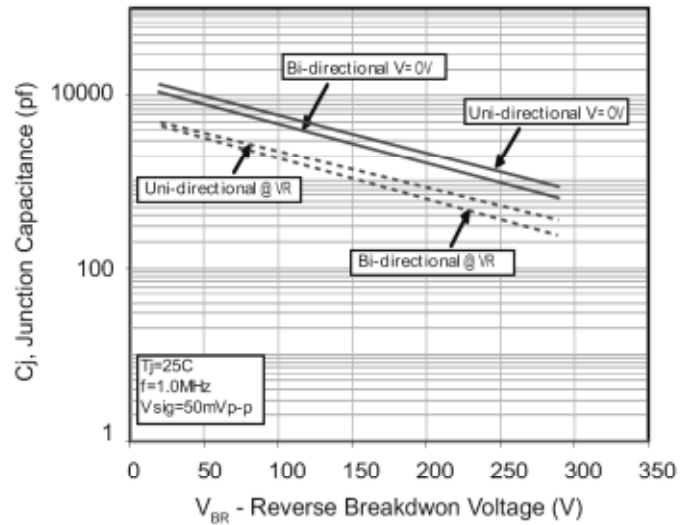
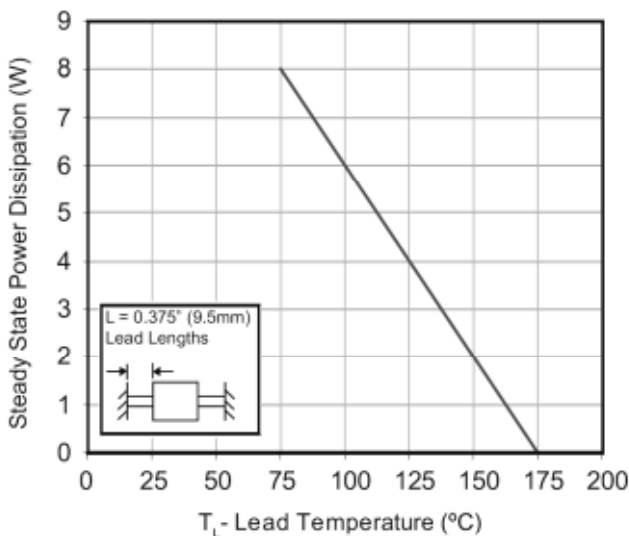
| Characteristic | Symbol | Value | Unit |
|--|----------|---------------|------------------|
| Peak Pulse Power Dissipation on 10/1000 μ s waveform (NOTE 1) | Pppm | Minimum 20000 | Watts |
| Peak Pulse Current of on 10-1000 μ s waveform (NOTE 1) | Ippm | SEE TABLE 1 | Amps |
| Steady State Power Dissipation at $T_l=75^\circ\text{C}$ Lead Lengths.375", (9.5mm)(NOTE 2) | Pm(AV) | 8.0 | Watts |
| Peak Forward Surge Current, 8.3ms Sine-Wave Superimposed on Rated Load, (JEDEC Method) (NOTE 3) | IFSM | 400.0 | Amps |
| Operatings and Storage Temperature Range | Tj, Tstg | -55 to +175 | $^\circ\text{C}$ |

NOTES:

- 1.Non-repetitive current pulse, per Fig.3 and derated above $T_a=25^\circ\text{C}$ per Fig.2.
- 2.Mounted on Copper Pad area of 0.8x0.8" (20x20mm) per Fig.5.
- 3.8.3ms single half sine-wave, or equivalent square wave, Duty cycle=4 pulses per minutes maximum

| TYPE | | Reverse Stand-Off Voltage | Breakdown Voltage Min. @I _T | Breakdown Voltage Max. @ I _T | Test Current | Peak Pulse Current | Reverse Leakage @V _{RWM} | Maximum Clamping Voltage @I _{PP} |
|-----------|------------|---------------------------|--|---|---------------------|---------------------|-----------------------------------|---|
| (UNI) | (BI) | V _{RWM} (V) | V _{BR} MIN(V) | V _{BR} MAX(V) | I _T (mA) | I _{PP} (A) | I _R (uA) | V _C (V) |
| 20KPA20A | 20KPA20CA | 20 | 22.34 | 24.38 | 50 | 548.9 | 5000 | 36.8 |
| 20KPA24A | 20KPA24CA | 24 | 26.81 | 29.26 | 50 | 490.3 | 5000 | 41.2 |
| 20KPA26A | 20KPA26CA | 26 | 29.04 | 31.69 | 50 | 451.9 | 2000 | 44.7 |
| 20KPA28A | 20KPA28CA | 28 | 31.28 | 34.13 | 50 | 420.8 | 1000 | 48.0 |
| 20KPA30A | 20KPA30CA | 30 | 33.51 | 36.57 | 5 | 392.2 | 250 | 51.5 |
| 20KPA32A | 20KPA32CA | 32 | 35.74 | 39.01 | 5 | 372.0 | 150 | 54.3 |
| 20KPA34A | 20KPA34CA | 34 | 38.0 | 41.4 | 5 | 351.3 | 50 | 57.5 |
| 20KPA36A | 20KPA36CA | 36 | 40.2 | 43.9 | 5 | 328.5 | 20 | 61.5 |
| 20KPA40A | 20KPA40CA | 40 | 44.7 | 48.8 | 5 | 297.9 | 15 | 67.8 |
| 20KPA44A | 20KPA44CA | 44 | 49.1 | 53.6 | 5 | 277.9 | 2 | 72.7 |
| 20KPA48A | 20KPA48CA | 48 | 53.6 | 58.5 | 5 | 254.4 | 2 | 79.4 |
| 20KPA52A | 20KPA52CA | 52 | 58.1 | 63.4 | 5 | 235.4 | 2 | 85.8 |
| 20KPA56A | 20KPA56CA | 56 | 62.6 | 68.3 | 5 | 218.1 | 2 | 92.6 |
| 20KPA60A | 20KPA60CA | 60 | 67.0 | 73.1 | 5 | 207.0 | 2 | 97.6 |
| 20KPA64A | 20KPA64CA | 64 | 71.5 | 78.0 | 5 | 194.2 | 2 | 104.0 |
| 20KPA68A | 20KPA68CA | 68 | 76.0 | 82.9 | 5 | 183.6 | 2 | 110.0 |
| 20KPA72A | 20KPA72CA | 72 | 80.4 | 87.8 | 5 | 174.1 | 2 | 116.0 |
| 20KPA80A | 20KPA80CA | 80 | 89.4 | 97.5 | 5 | 155.4 | 2 | 130.0 |
| 20KPA88A | 20KPA88CA | 88 | 98.3 | 107.3 | 5 | 142.3 | 2 | 142.0 |
| 20KPA96A | 20KPA96CA | 96 | 107.2 | 117.0 | 5 | 130.3 | 2 | 155.0 |
| 20KPA104A | 20KPA104CA | 104 | 116.2 | 126.8 | 5 | 120.2 | 2 | 168.0 |
| 20KPA112A | 20KPA112CA | 112 | 125.1 | 136.5 | 5 | 111.0 | 2 | 182.0 |
| 20KPA120A | 20KPA120CA | 120 | 134.0 | 146.3 | 5 | 104.1 | 2 | 194.0 |
| 20KPA132A | 20KPA132CA | 132 | 147.4 | 160.9 | 5 | 94.8 | 2 | 213.0 |
| 20KPA144A | 20KPA144CA | 144 | 160.8 | 175.5 | 5 | 87.1 | 2 | 232.0 |
| 20KPA160A | 20KPA160CA | 160 | 178.7 | 195.0 | 5 | 78.3 | 2 | 258.0 |
| 20KPA172A | 20KPA172CA | 172 | 192.1 | 209.7 | 5 | 72.9 | 2 | 277.0 |
| 20KPA180A | 20KPA180CA | 180 | 201.1 | 219.4 | 5 | 69.4 | 2 | 291.0 |
| 20KPA192A | 20KPA192CA | 192 | 214.5 | 234.0 | 5 | 65.4 | 2 | 309.0 |
| 20KPA204A | 20KPA204CA | 204 | 227.9 | 248.7 | 5 | 61.4 | 2 | 329.0 |
| 20KPA216A | 20KPA216CA | 216 | 241.3 | 263.3 | 5 | 58.0 | 2 | 348.0 |
| 20KPA232A | 20KPA232CA | 232 | 259.1 | 282.8 | 5 | 54.0 | 2 | 374.0 |
| 20KPA240A | 20KPA240CA | 240 | 268.1 | 292.6 | 5 | 52.2 | 2 | 387.0 |
| 20KPA256A | 20KPA256CA | 256 | 286.0 | 312.1 | 5 | 49.0 | 2 | 412.0 |
| 20KPA280A | 20KPA280CA | 280 | 312.8 | 341.3 | 5 | 44.8 | 2 | 451.0 |
| 20KPA300A | 20KPA300CA | 300 | 335.1 | 365.7 | 5 | 41.8 | 2 | 483.0 |

For bidirectional type having V_{RWM} of 40 volts and less, the I_R limit is double. For parts with A, the V_{BR} is ± 5%

Figure 1 - Peak Pulse Power Rating Curve

Figure 2 - Pulse Derating Curve

Figure 3 - Pulse Waveform

Figure 4 - Typical Junction Capacitance

Figure 5 - Steady State Power Derating Curve

Figure 6 - Maximum Non-Repetitive Peak Forward Surge Current
